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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

MUSSER, BARBARA J

ART UNIT	PAPER NUMBER
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1733

DATE MAILED: 12/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/749,160

Applicant(s)

KATZ ET AL.

Examiner

Barbara J. Musser

Art Unit

1733

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) 1-10 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>6/1/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of the restriction in the reply filed on 9/29/05 is acknowledged. The traversal is on the ground(s) that the product cannot be made by a different method. This is not found persuasive because the product can be made by applying part of the mastic layer to the scrim layer and part of it to the organic layer and then joining the two portions of the mastic layer together.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 11-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 11, it is unclear what is meant by a "mastic" as the specification does not define it. The specification indicates the mastic layer is often bituminous and acts to block exterior noise[0024] but does not indicate these are requirements. It also suggests the mastic can be non-tacky(claim 12) requiring an adhesive to bond it to the other layers(claim 13) while the dictionary definition of a mastic is a pasty substance, which one would think would be tacky since it was fluid. For the purposes of examination, a mastic is considered to be any material which can act to bond the

organic and scrim layers together. It is unclear whether the product of the claim is required to have shoddy(the material) in it since one would expect a shoddy(the article) to include a layer of shoddy(the material) since it is named for that material and since the definition of a shoddy is the material not the article. For the purposes of examination, the claim is not considered to require shoddy(the material). It is noted that the definition of shoddy is not the layer behind fabric, etc. in a vehicle, but the fabric made from wool.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 11-13 and 15 are rejected under 35 U.S.C. 102(a) as being anticipated by Allison et al.(U.S. Publication 2003/0066708A1).

Allison discloses forming a sound attenuating layer for vehicles by bonding together a fiber batting(12), a thermoplastic layer(14), a thermoplastic layer(16), and a scrim(shoddy)(18). The two thermoplastic plastic layers are considered the mastic layer

as the bond the batting and scrim together. Alternatively, the thermoplastic layer(14) can be considered the organic layer since both the batting and the thermoplastic layer are made of organic materials.([0028]-[0029], [0035]) Since these types of materials are intended for use in automobiles to attenuate sound, one in the art would understand that they would be capable of being employed in the headliner of the vehicle wherein they would be covered with a non-carpeted material.

Regarding claim 12, the thermoplastic layer(16) must be either tacky or non-tacky as there is no other alternative.

Regarding claim 13, Allison et al. discloses the batting and first and second thermoplastic layers can be fused together[0029-0030]. Fusing occurs by heating of one material.

Regarding claim 15, Allison et al. discloses the second thermoplastic layer(16) can be bonded to the scrim layer(18) via an adhesive.[0031]

6. Claims 11-13 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Haussling(U.S. Patent 4,828,910).

Haussling discloses a mat for uses in vehicles comprising a core(3), a fibrous mat impregnated with resin(mastic layer)(4), and a scrim(5). The core is made of thermoplastic fibers.(Col. 2, ll. 62-63) Since these types of materials are intended for use in automobiles to attenuate sound, one in the art would understand that they would be capable of being employed in the headliner of the vehicle wherein the scrim would contact a non-carpeted surface since the scrim is intended to be facing the roof.

Regarding claim 12, the resin impregnated mats must be either tacky or non-tacky as there is no other alternative.

Regarding claims 13 and 15, the layers bond together under heat and pressure(Col. 5, ll. 12-13; Col. 6, ll. 1-5, 26-28) with the resin impregnated in the mat bonding the layers together. Therefore the resin in the mat is heated to bond it to the other layers.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 11-13, 15, 17, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art in view of Haussling.

The admitted prior art discloses traditional shoddies for use in automobiles are made from mastic material bonded to an organic fiber layer.([0005]-[0006]) The admitted prior art does not disclose a scrim layer opposite the fiber layer but does disclose that a known problem in the art is the mastic sticking to other layers[0007] and that sometimes a release layer is used. Haussling discloses using a scrim layer which forms part of the final product as a release layer(Col. 6, ll. 1-5). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a cloth scrim as a permanently bonded release layer on the mastic layer of the admitted prior art since the admitted prior art discloses it is known to use release layers with the

mastic layer, since Haussling discloses it is known to use scrim layers which become part of the final article as release layers and since using a release layer which is permanently bonded to the article would reduce processing steps.

Regarding claim 12, a bituminous material would be tacky.[0006]

Regarding claim 13, the admitted prior art discloses bonding together the mastic and fiber layers.[0006] Since the mastic is tacky, it would bond the mastic to the fiber layer.

Regarding claim 15, Haussling discloses bonding the scrim layer to an adjacent layer through the resin present in the adjacent layer.(Col. 6, ll. 1-5) Since the mastic layer is tacky, this would bond the scrim to it.

Regarding claim 17, the admitted prior art does not disclose the relative locations of the decorative cover and the fiber layer but does disclose the closer the mastic layer is to the surface(decorative cover) the greater its vibration efficiency.[0006] This suggests the mastic layer is between the fiber layer and the decorative layer. The admitted prior art also discloses that shoddies are placed against non-carpeted decorative layers.[0009] It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the scrim layer of the shoddy of the admitted prior art and Haussling to the bottom of a non-carpeted decorative layer since this would keep the mastic layer close to the decorative layer since scrims are relatively thin and to apply it to a non-carpeted layer since the admitted prior art discloses it is known to apply a shoddies to non-carpeted layers.[0009]

Regarding claim 18, while the admitted prior art does not disclose how the shoddy is bonded to the non-carpeted layer, one in the art would appreciate that any conventional method of joining two layers together such as applying an adhesive to one or the other of the layers being bonded could be used. It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply adhesive to either the scrim layer or the back of the non-carpeted layer since the use of adhesive to bond layers together is well-known and conventional within the bonding arts.

9. Claims 14 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art and Hausssling as applied to claim 11 above, and further in view of Fujita et al.(U.S. Patent 4,873,045).

The references cited do not disclose forming the shoddy by placing one layer in a mold, extruding the mastic layer onto the layer in the mold, and then applying the second layer to the mastic. Fujita et al. discloses bonding together layers in a automotive interior component by placing a first layer on a mold, extruding a bonding material, and applying a second layer to the bonding material.(Abstract; Figure 2) It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply either the organic fine layer or the scrim to a mold, extrude the mastic material onto it, and then apply the other of the scrim and organic layer to the mastic since Fujita et al. shows this is a well-know method of bonding together components in an automobile and because this allows bonding of porous materials without forcing the adhesive material through the porous material.(Col. 2, ll. 17-21)


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Barbara J. Musser whose telephone number is (571) 272-1222. The examiner can normally be reached on Monday-Thursday; alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571)-272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


BJM


SAM CHUAN YAO
PRIMARY EXAMINER